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**U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION REPORT**

**I. HEADING**

**Date:** September 27, 2000  
**Subject:** Peoples Energy Mercury Spills, Cook and Lake County, Illinois  
**From:** Brad Stimple, Fred Bartman U.S. EPA On-Scene Coordinator, Region 5

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**POLREP: #1 (Initial)**

**II. BACKGROUND**

**CERCLIS ID No:** TBD  
**Response Authority:** CERCLA  
**Start Date:** 09/13/00  
**Completion Date:**

**SITE ID #** B5R3  
**NPL Status:** NA  
**Action Memo Status:** NA

**III. SITE DESCRIPTION**

**A. Incident Category:** Residential and Institutional/Industrial Mercury Spills - PRP Oversight

**Site Location:** Various Addresses in Peoples Energy Service Area (Cook County) Including  
North Shore Gas (Lake County) Service Area  
**Longitude/Latitude:** NA

**1. Site Description:**

On 9/13/00, the Chicago Department of Environment (DOE) was informed by a resident of the city's Mount Greenwood neighborhood that mercury was discovered on the floor near the location of the gas meter in the basement of the home. Natural gas is supplied to the home by Peoples Energy (Peoples). DOE informed U.S. EPA and both agencies responded that evening and confirmed that metallic mercury did indeed exist. The spill was confined to a cabinet area built around the meter set and did not pose an immediate health threat, but high mercury vapor levels were recorded inside the cabinet. Peoples representatives also arrived at the home and were informed by U.S. EPA to initiate cleanup as soon as possible the following morning.

On 9/14/00, Peoples retained a cleanup contractor and an industrial hygiene company to begin cleanup of the Mount Greenwood home located at 11251 South Troy Street. The home has since been cleared by ATSDR after collection and analysis of final confirmation air samples (hopcalite).

On the evening of 9/14/00, Peoples announced that approximately 25,000 homes, located in three distinct city locations (Mount Greenwood, Clearing and Edison Park), would be evaluated to determine whether mercury contamination may exist due to replacing mercury containing gas pressure regulators over the course of many years. As of 9/26/00, approximately 22,450 homes have been visually screened, 50 have visual indications of spilled mercury and 15 have been positively identified as requiring decontamination. Cleanup has commenced or is complete at most of the 15 locations.

On 9/19/00, U.S. EPA and DOE met with Peoples to discuss their plan to screen the 25,000 homes and to properly complete cleanup and decontamination if necessary. It was at this time that U.S. EPA was informed that Peoples services approximately 1,800 institutional and industrial customers where a mercury filled manometer may have been used to measure gas pressure. Of these facilities, approximately 450 are considered sensitive (ie. schools, churches, nursing homes etc.). Peoples indicated that these facilities would be inspected to determine whether contamination may exist. As of 9/26/00, 920 of these facilities have been at least visually inspected. Fourteen locations have been identified as having some degree of mercury present and cleanup and decontamination was necessary. The remaining facilities have been deemed low priority but will be evaluated as time permits.

U.S. EPA was later informed that a Peoples subsidiary, North Shore Gas, who services northeastern Chicago suburbs, will be inspecting approximately 55,000 residents and 1,200 institutional and industrial facilities for the presence of spilled mercury from regulators, manometers or other pressure measuring devices. U.S. EPA and the Office of the Attorney General (AGO) were only informed of this when a home located at 920 Prescott Street, Waukegan, IL was found to have visible mercury on the basement floor near the gas meter and required decontamination. According to North Shore, a mercury regulator was removed from this residence in 1999. North Shore has also indicated that mercury removed from the regulator was sold by an employee of North Shore to Suburban Recycling on Sheridan Road in North Chicago, IL. North Shore has indicated that they do not know how the regulator carcass was disposed. As of 9/27/00, visual inspections of approximately 3,800 North Shore homes were completed, 12 have visual spilled mercury and 5 have been identified as requiring decontamination. Inspections of 154 sensitive institutional facilities had not yet begun.

On 9/25/00, representatives of Peoples and North Shore were asked to attend a meeting held by the AGO mercury task force of which U.S. EPA is a member. The AGO and members of the task force were briefed on Peoples and North Shore activities to date. Draft protocols outlining screening and cleanup methods for residential and institutional/industrial settings were submitted and will be reviewed by task force members.

To date, the DOE with assistance from U.S. EPA has provided oversight for the screening and cleanup activities of residences located in the Chicago metro area serviced by Peoples. U.S. EPA has been providing monitoring and technical assistance for the North Shore residential service area. The Illinois Environmental Protection Agency (IEPA) and U.S. EPA have been providing oversight and technical assistance to Peoples and North Shore for the institutional and industrial facilities.

ATSDR and the Illinois State Health Department (IDPH) were informed of the Peoples residential spills and have been working with the company to set up an appropriate method to inform potentially affected residents of medical testing and monitoring that will be made available to them by Peoples. A similar system to that of the Nicor Gas mercury spill incidents will be employed. During the residential cleanup phase, occupants will

be temporarily relocated by Peoples and/or North Shore as necessary until the homes have been properly decontaminated and deemed safe to return.

ATSDR has developed a guideline cleanup value for residential settings of 0.3/ug/m<sup>3</sup> (micrograms per cubic meter) and uses variables such as sample location, age of occupants, and whether pregnant woman reside in the home to evaluate safe re-occupancy. Confirmation air samples are collected after a cleanup using a pump and tube method and are analyzed at a certified laboratory (see formal sampling plan for more detailed information). ATSDR, IDPH and U.S. EPA evaluate those results. If the home is deemed safe for return, IDPH will send a clearance letter and a copy of the results to the home owner.

Mercury regulators attached to gas meters were commonly used before approximately 1960, to reduce gas flow pressure for residential use from medium and high pressure gas mains. When technology became available, mercury regulators were replaced with spring loaded regulators and were commonly replaced. As with the Nicor situation, regulators were many times improperly removed resulting in mercury spills within the homes. In most cases, the spills were confined to basement areas. Mercury regulators still exist in homes today and are replaced by gas companies as they are discovered. Peoples and North Shore have indicated that protocols for the proper removal of mercury from mercury regulators in the home were never developed.

## **2. Description of threat:**

The presence of metallic mercury and associated vapor release discovered in many of the above mentioned homes and commercial settings poses a serious threat to human health and the environment direct contact, ingestion, and inhalation. The primary exposure route of concern associated with these spills is inhalation. Initial MVA screening results discovered by U.S. EPA, Peoples and by the cleanup contractor in homes identified to date, indicate levels well above guideline levels established by ATSDR for residential settings.

## **IV. RESPONSE INFORMATION**

### **A. Situation**

Peoples and North Shore have assumed responsibility for the mercury spills and have retained cleanup contractors to perform necessary removal work and decontamination. U.S. EPA has assumed a monitoring and oversight role to ensure that the homes are properly decontaminated and that air monitoring activities are properly pursued.

### **3. Enforcement**

On 9/14/00, U.S. EPA issued a CERCLA 104(e) Request for Information to Peoples Energy which included Peoples Gas in Chicago and North Shore Gas in northeastern suburbs. A response from Peoples Energy was received on 9/21/00, and is in the process of being reviewed by enforcement personnel.

It is not known what enforcement action either the AGO or the Cook County States Attorney's Office may pursue if any.

### **B. Planned Removal Actions**

U.S. EPA with the help of ATSDR and IDPH, will continue to monitor the residential cleanup, consult with residents and evaluate confirmation air sampling results as necessary. U.S. EPA working with IEPA will

continue to monitor and oversee cleanup activities at the institutional/industrial facilities as necessary. These activities are being completed both in Peoples and North Shore service areas. Because either companies do not yet have a Lumex MVA, U.S. EPA has been more active in screening affected homes and businesses than with the Nicor Gas situation.

**C. Key Issues**

No key issues to discuss at this time.

**V. COSTS**

*TO BE DETERMINED.*

\* The above accounting of expenditures is an estimate based on amounts known by the OSC at the time of preparation of this report. The cost accounting data shown in this report does not necessarily represent the exact monetary figures which the U.S. Government may include in any claim for cost recovery.

**VI. DISPOSITION OF WASTES**

Any recovered mercury and all contaminated items generated as part of the residential home cleanup effort is being properly disposed by cleanup contractors retained by Peoples Energy under U.S. EPA and IEPA supervision.